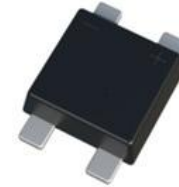


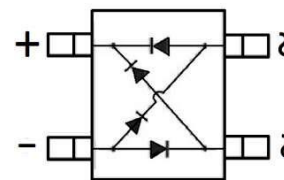
0.8A Glass Passivated Bridge Rectifier

Features

- Glass Passivated Chip Junction
- Low Reverse Voltage Leakage Current
- High Surge Current Capability
- Low Forward Voltage Drop
- Reverse Voltage : 50 to 1000V
- Forward Current : 0.8A
- High temperature soldering : 260°C/10s at terminals



UMBF



Applications

- Switching power supply

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter | Symbol | UMB 05F | UMB 1F | UMB 2F | UMB 4F | UMB 6F | UMB 8F | UMB 10F | Unit | |
|--------------------------------------------------------------------------------------------------|-------------------|--------------|--------|--------|--------|--------|--------|---------|--------------|---------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum Average Forward Rectified Current@ $T_C=115^\circ C$ | $I_{F(AV)}$ | 0.8 | | | | | | | A | |
| Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method) | I_{FSM} | 25 | | | | | | | A | |
| Maximum Instantaneous Forward Voltage @0.8A | V_F | 1.1 | | | | | | | V | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $T_A=25^\circ C$ | 5.0 | | | | | | | I_R | μA |
| | $T_A=125^\circ C$ | | | | | | | | | |
| Typical Junction Capacitance (Note 1) | C_J | 13 | | | | | | | pF | |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 110 | | | | | | | $^\circ C/W$ | |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | (-55 to+150) | | | | | | | $^\circ C$ | |

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. P.C.B. mounted with $4 \times 1.5" \times 1.5"$ (3.81×3.81 cm) copper pad areas.

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Average Rectified Output Current Derating Curve

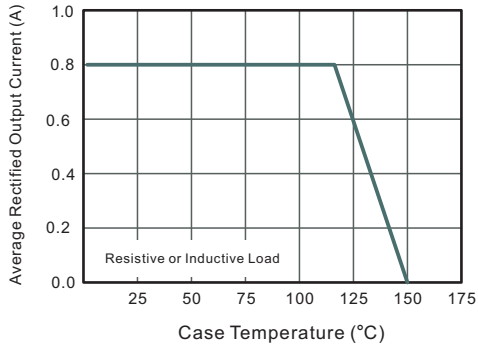


Fig.2 Typical Reverse Characteristics

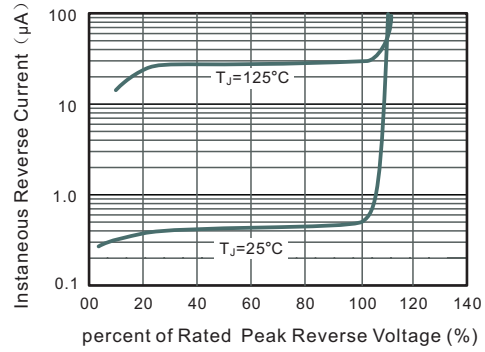


Fig.3 Typical Instantaneous Forward Characteristics

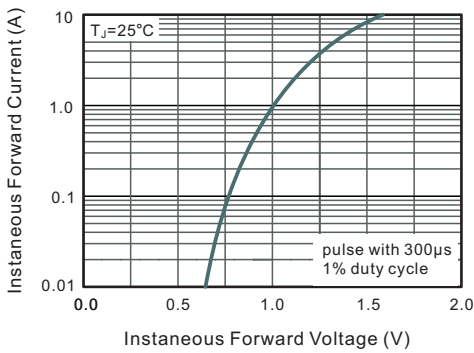


Fig.4 Typical Junction Capacitance

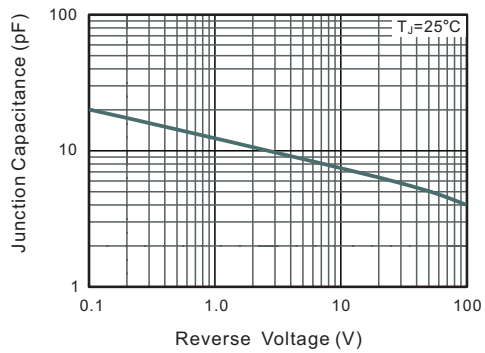
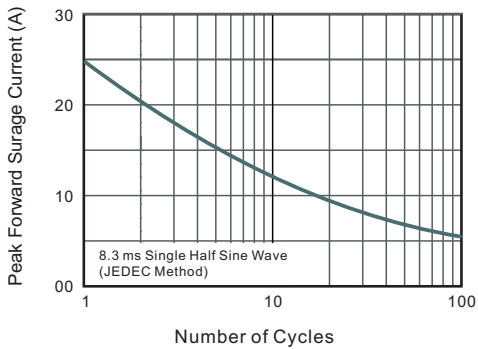
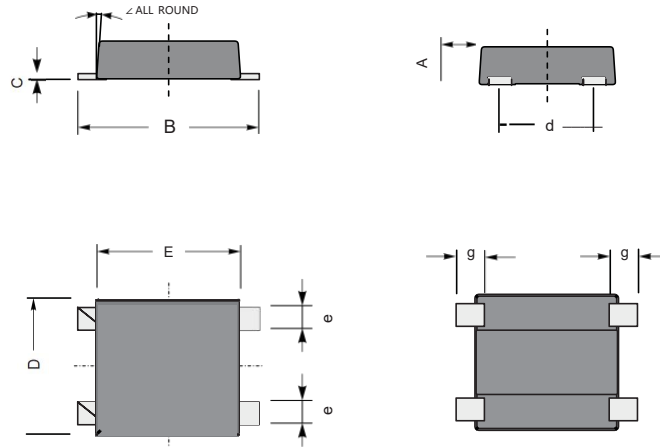


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



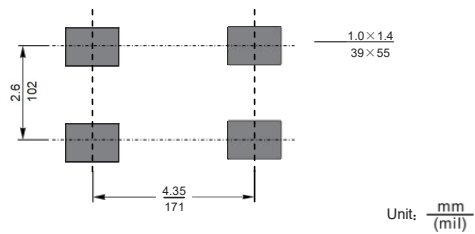
Package Outlines (Dimensions in mm)

Plastic surface mounted package(UMBF)



| UNIT | | A | C | D | E | B | g | d | e |
|------|-----|-----|-----|------|-----|-----|------|-----|-----|
| mm | max | 1.4 | 0.3 | 4.05 | 3.9 | 5.2 | 0.95 | 2.8 | 0.9 |
| | min | 1.0 | 0.1 | 3.65 | 3.5 | 4.8 | 0.55 | 2.4 | 0.5 |

The recommended mounting pad size



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